



shrimp

x·SOY600™

Essential nutrients for healthy animals





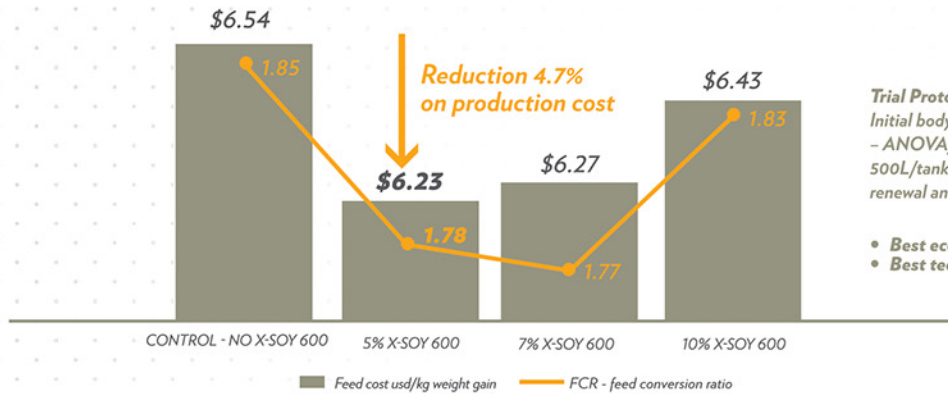
Environmental and Nutritional Benefits

X-SOY 600 • SUSTAINABLE NUTRITION FOR SHRIMP FARMING.

- Highly Digestible
- Eco-friendly
- Excellent performance
- Stable supply
- Economical
- No seasonal fluctuation

PERFORMANCE

Evolution of performance of shrimp (*Litopenaeus vannamei*) using X-SOY 600 diets in fishmeal replacement¹



Trial Protocol:

Initial body weight = $1.82 \pm 0.18g$ (n = 800; P < 0.05 - ANOVA) - Indoor system = 70 shrimps/m² - 500L/tank - 24h-period of continuous flow of renewal and filtration water system.

- Best economic outcome - 5% X-SOY 600
- Best technical performance - 7% X-SOY 600

X-SOY 600 • better technical and economical performance compared to fish meal as the main source of dietary protein

Evaluation of soy protein concentrate to formulate shrimp diets, *Litopenaeus vannamei*, with nutritional commercial profile²

Trial Protocol:
X-SOY 600 replaced local fish meal (Thailand) at ratio of 25, 50 e 75%. Body weight = 2.84 g; 30 shrimp randomly allocated in 30 tanks (6 tanks per treatment). The experiment was conducted in 150 liters tanks at an indoor system. Shrimps were fed, four times per day, to satiety.



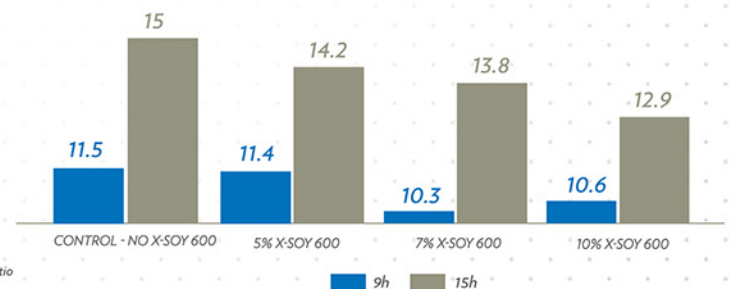
X-SOY 600 better performance and less feed waste

- 5.8% reduction of feed intake
- 7.2% reduction of feed conversion ratio (FCR)

Naturally eco-friendly and cost-effective

Evaluation of soy protein concentrate use in pellet water stability³

Dry matter leaching (%) at different immersion period at different levels of X-SOY 600



X-SOY 600 diets benefit pellet stability with less dry matter loss

Amino acids	Total %	Energy	Kcal/kg
Lysine	3.87	Gross	4471
Methionine	0.85		
Sulfur amino acids	1.77	Minerals	
Threonine	2.47	Ca	0.40
Tryptophan	0.81	Total P	0.73
Arginine	4.59	Available P	0.27
Valine	3.01		

¹Nunes, A.J.P. Evaluation of soy protein concentrate use for white shrimp feed, *Litopenaeus vannamei*, on commercial diets. International Aquafeed Magazine, 2012. ²Internal report - Technical data from research trial conduct in Kidchakan Supamattaya Aquatic Animal Health Research Center - Prince of Songkla University: Evaluation of soy protein concentrate to formulate whiteleg shrimp diets, *Litopenaeus vannamei*, with nutritional commercial profile, 2012. ³Internal report - Technical data from research trial conduct in LABOMAR - Ceará University - Brazil: Evaluation of soy protein concentrate in whiteleg shrimp, *Litopenaeus vannamei*, in diets with commercial nutritional profile, 2012.